REMARKS

These remarks are in response to the Office Action mailed October 10, 2006. Claims 14-17, 21, 23-34 and 27 have been amended. Support for the amendments can be found at, for example, at paragraph [00026] which refers to "wells". Applicants submit that the term "macrowell" avoids any confusion with nanopore and macropore. The amendments to not narrow the scope of the claims, but rather substitute one term for another to avoid confusion. No new matter is believed to have been introduced.

I. REJECTION UNDER 35 U.S.C. §112, SECOND PARAGRAPH

Claims 14-27 stand rejected under 35 U.S.C. §112, second paragraph as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants respectfully traverse this rejection.

Applicants have amended the claims to set forth the relationship of the nanopores and macrowell. As set forth in the specification the substrate comprises a silicon material that is nanoporous (see, e.g., paragraphs [0013] and [0026]). The nanoporous material is treated/modified to have macrowells suitable for culturing at least one cell. Applicants believe that the amendments and remarks above overcome the rejection. Accordingly, Applicants respectfully request withdrawal of the rejection.

II. REJECTION UNDER 35 U.S.C. §103

Claims 14-27 stand rejected under 35 U.S.C. §103 as allegedly unpatentable over Griffith *et al.* (U.S. Pat. No. 6,197,575) in view of Steiner *et al.* and Beattie *et al.* (U.S. Pat. No. 6,893,816). Applicants respectfully traverse this rejection.

One of skill in the art will recognize that non-porous silicon substrates and nanoporous silicon substrates differ in their properties including, for example, their fluorescent and luminescent transmission properties.

Griffith *et al.* teaches the use of culturing cells in a substrate comprising channels generated through a silicon support. Griffith *et al.* states at column 9, lines 60-62, "FIG. 1 is a cross-sectional view of a tissue-based biosensor system **10**, with a view of the scaffold **12** (silicon ship with an array of open channels **14** *through* the thickness). . . ." (emphasis ours). Griffith *et al.* goes on to describe the dimensions of the channels at column 10, lines 40-53, as being in the micron range.

In contrast, Applicants' invention comprises "macrowells" in a nanoporous silicon support. Such macrowell (as depicted in Applicants' Figure 5) do not penetrate "through" the nanoporous silicon. Furthermore, Griffith *et al.* fails to teach or suggest culturing a cell-type in a macrowell on a nanoporous silicon support. Thus, the primary reference fails to teach or suggest each and every element of Applicants' claimed invention.

To overcome the deficiencies of the primary reference, the office action combines Griffith *et al.* with Steiner *et al.* and Beattie *et al.* Neither of the secondary references described macrowells on a nanoporous silicon nor do they describe the culturing of a cell on such a nanoporous silicon support comprising macrowells to monitor cellular behaviour in response to a compounds.

Steiner *et al.* describe nanoporous silicon generally and does not described the generation of macrowells or for that matter cell culture techniques. Beattie *et al.* describes nanoporous silicon for use in DNA assays. The device of Beattie *et al.* describes a second polymeric material associated with a planar nanoporous silicon support that is used as a collecting device (see, e.g., Brief Description of the Drawings at FIG. 1, and Example 2, of Beattie *et al.*).

The combination of references fails to teach or suggest at least macrowells on a nanoporous silicon material and methods of assaying a cell in the presence of a compound. Accordingly, the combination of references fails to set forth a *prima facie* case of obviousness.

Applicants respectfully request that if there should be any questions regarding the foregoing amendments or remarks that the Examiner call the undersigned. The Commissioner is hereby authorized to charge any fee deficiency or credit any overpayment of fees to Deposit Account No. 02-4800.

Respectfully submitted,

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